



# Challenges Ahead for the Montana Economy

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## Today's Topics

- Past Economic Performance
- Current Recession
- Future Projections
- Future Challenges and the Education Solution
  - Aging Population
  - Global Competitiveness



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# Today's Conclusions

Education and worker training is needed to:

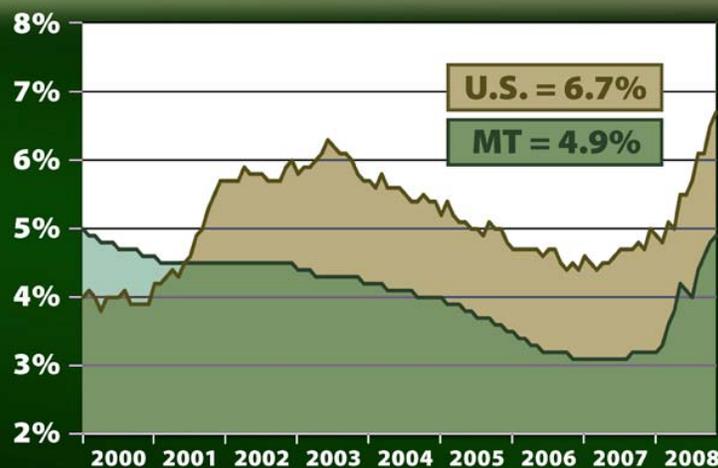
1. Address worker shortages by
  - Increasing labor force participation
  - Increase productivity
  - Increase education and training
2. Maintain job growth by
  - Maintaining global competitiveness through innovation
  - Addressing worker shortages



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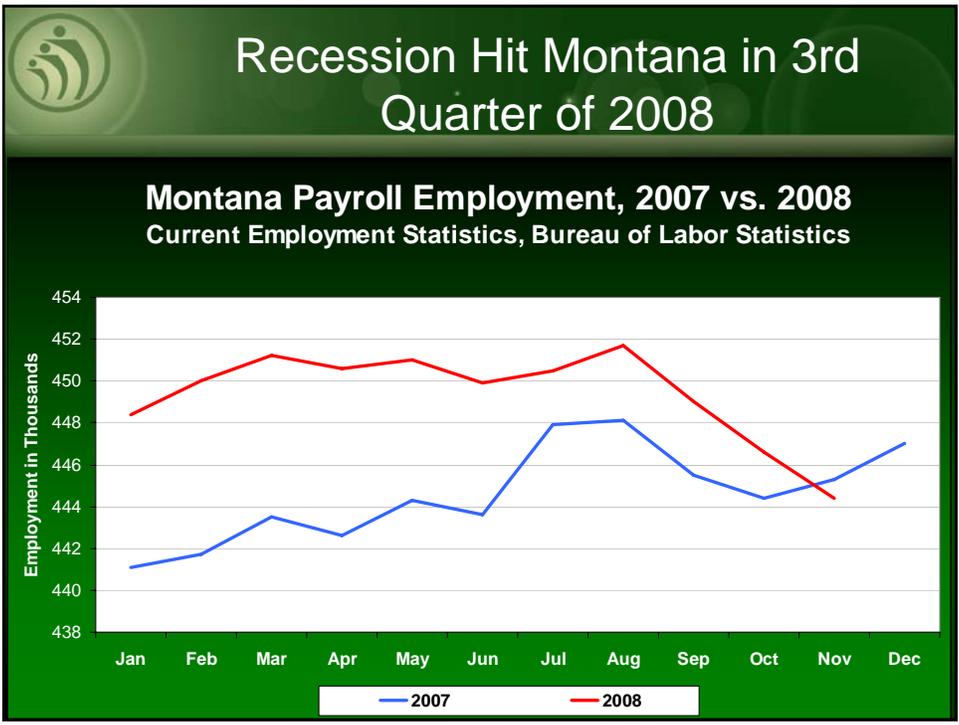
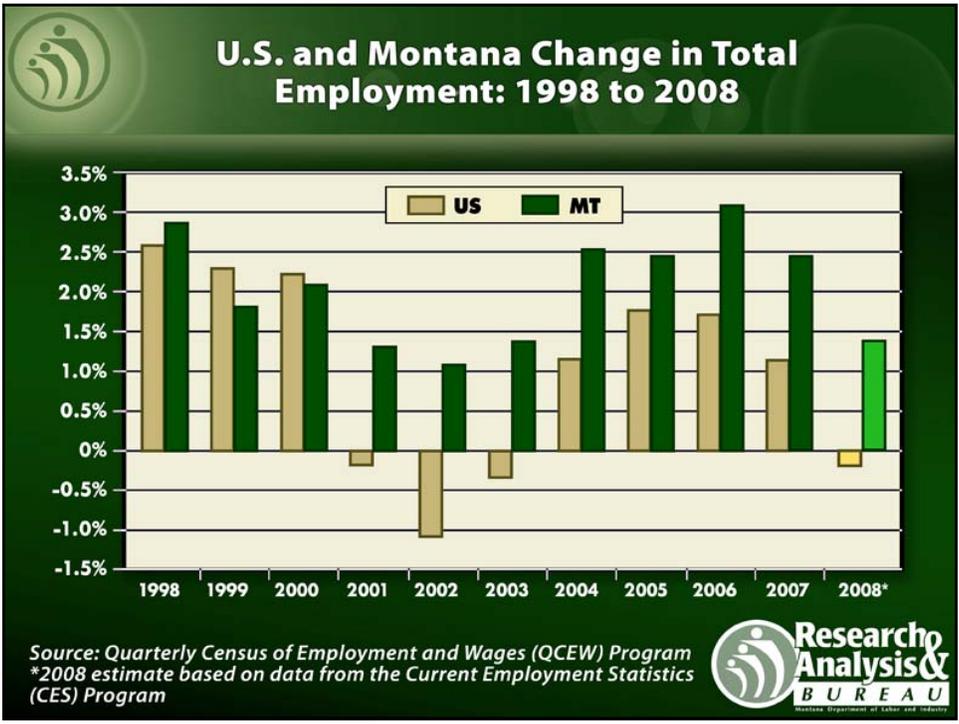


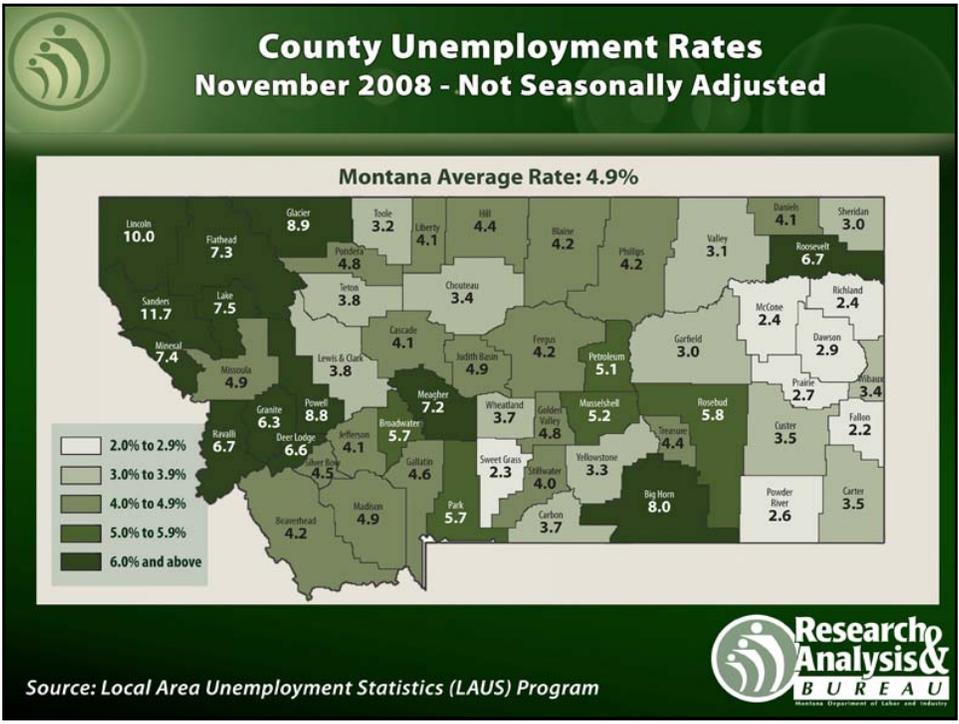
## U.S. and Montana Seasonally Adjusted Unemployment Rate: 2000 to 2008



Source: Local Area Unemployment Statistics (LAUS) Program







## Take Away Points

- Montana has been affected by national recession, although not as much as other states.
- National recession expected to recover in 2009.
- Montana's recovery depends on global recovery.






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## Future Projections

- Research and Analysis Bureau produces occupational projections every two years.
- Projected employment growth:
  - 1.73% annually for 2006-2016.
  - 2006: 3.1%
  - 2007: 2.5%
  - 2001-2007: 2.2% annually



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# Future Projections

- Projections were completed before recession.
  - Overestimate growth
- Heavily influenced by the growth in construction during 2005-2007 period.
  - Recent economic conditions have impacted this industry.



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# Fast-Growing Occupations

Top Ten Occupations by Total Annual Openings, More than a Bachelor's Degree, 2006-2016 Projections

	Annual Openings Due to Growth	Total Annual Openings	Annual Wage
1 General and Operations Managers	98	273	72,356
2 Lawyers	39	83	64,960
3 Chief Executives	11	48	81,332
4 Pharmacists	33	52	87,256
5 Educational, Vocational, and School Counselors	16	35	38,086
6 Environmental Scientists and Specialists	28	46	44,479
7 Physicians and Surgeons, All Other	13	30	141,989
8 Librarians	5	22	37,191
9 Education Administrators, Elementary and Secondary	11	28	*
10 Medical and Health Services Managers	13	30	68,568



## Fast-Growing Occupations

### Top Ten Occupations by Total Annual Openings, Bachelor's Degree 2006-2016 Projections

		Annual Openings Due to Growth	Total Annual Openings	Annual Wage
1	Elementary School Teachers	99	221	36,549
2	Secondary School Teachers	40	161	37,892
3	Accountants and Auditors	91	154	55,193
4	Construction Managers	50	114	63,326
5	Insurance Sales Agents	44	85	48,096
6	Business Operations Specialists, All Other	46	66	50,681
7	Middle School Teachers	26	62	36,130
8	Property and Real Estate Managers	30	52	33,428
9	Civil Engineers	22	47	61,451
10	Computer Systems Analysts	26	44	67,722



## Fast-Growing Occupations

### Top Ten Occupations by Total Annual Openings, Associates or Vocational Award, 2006-2016 Projections

		Annual Openings Due to Growth	Total Annual Openings	Annual Wage
1	Registered Nurses	195	317	53,315
2	Nursing Aides, Orderlies, and Attendants	111	157	20,798
3	Automotive Technicians and Mechanics	77	147	34,500
4	Licensed Nurses	33	113	32,594
5	Welders, Cutters, Solderers, and Brazers	35	64	44,415
6	Computer Support Specialists	21	55	35,768
7	Real Estate Sales Agents	21	45	41,715
8	Fitness Trainers and Aerobics Instructors	27	44	28,743
9	Hairdressers and Cosmetologists	20	42	19,744
10	Mechanics and Diesel Engine Specialists	16	42	39,126



## Fast-Growing Occupations

### Top Ten Occupations by Total Annual Openings, Significant Work Experience 2006-2016 Projections

	Annual Openings Due to Growth	Total Annual Openings	Annual Wage
1 Carpenters	302	450	33,256
2 Executive and Administrative Assistants	130	228	30,773
3 First-Line Managers of Retail Sales Workers	87	201	34,444
4 Cooks, Restaurant	78	184	19,284
5 Sales Representatives, Wholesale and Manufacturing	88	162	43,138
6 Managers, All Other	56	162	62,954
7 Electricians	71	138	45,910
8 First-Line Managers of Construction and Extraction	76	131	53,281
9 Plumbers, Pipefitters, and Steamfitters	67	116	45,171
10 First-Line /Managers of Office Workers	45	111	44,626

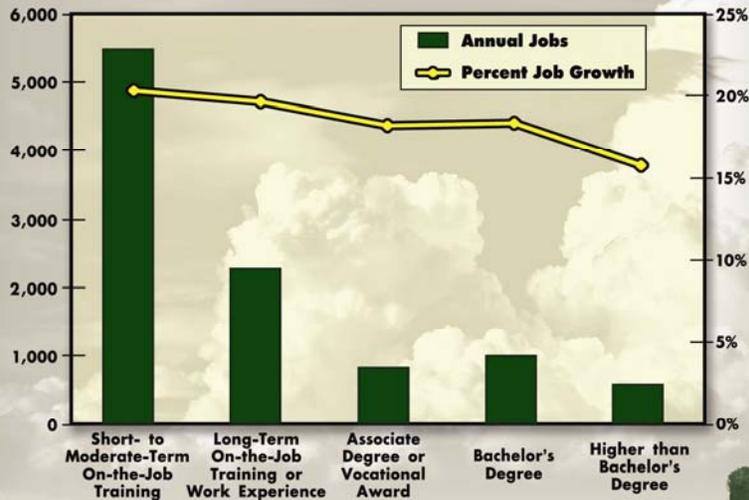


## Fast-Growing Occupations

### Top Ten Occupations by Total Annual Openings, Short-term Work Experience, 2006-2016 Projections

	Annual Openings Due to Growth	Total Annual Openings	Annual Wage
1 Retail Salespersons	542	1106	24,525
2 Cashiers	126	713	17,629
3 Waiters and Waitresses	179	696	16,469
4 Bookkeeping and Auditing Clerks	299	515	28,615
5 Janitors and Cleaners	218	386	21,462
6 Food Preparation and Serving Workers	219	376	16,529
7 Bartenders	114	316	16,943
8 Secretaries	127	300	23,562
9 Maids and Housekeeping Cleaners	149	268	16,837
10 Child Care Workers	116	262	17,119

**Projected Job Growth by Education and Training Category: 2006 to 2016**



Source: Research and Analysis Bureau Job Projections 2006 - 2016



**2007 Average Salary by Education Category**



Source: Compiled by the Research and Analysis Bureau, Occupational Employment Statistics (OES) Program





## Take-Away Points

- Projections predict continued job growth through 2016.
- Job growth greatest in lower-skill jobs, which raises concerns about continuing wage growth.
- Renewed focus on developing high-wage / knowledge-based jobs in Montana.
- Increased worker training is needed to increase worker productivity even in low-wage jobs.



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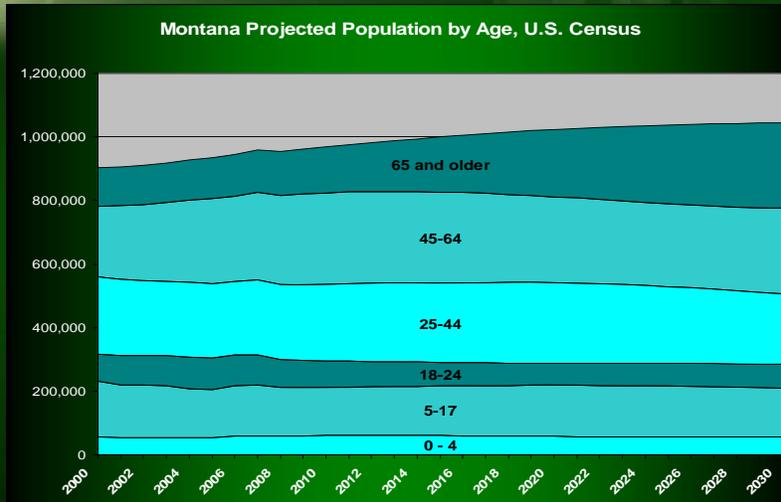


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## Challenge: Aging Demographic



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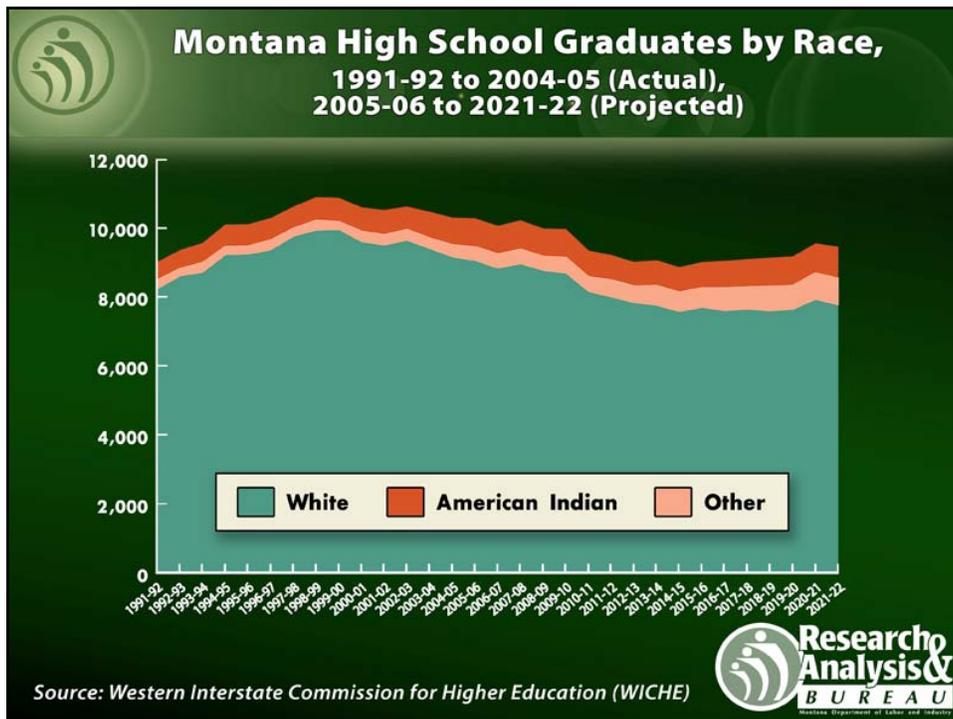
## Impact of Changing Demographics on Education Systems



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## Take-Away Points

- Aging population will likely result in lower enrollment in public education systems.
- However, it will not result in a lower demand for education.
- Focus will change to hands-on worker training and flexible education systems.

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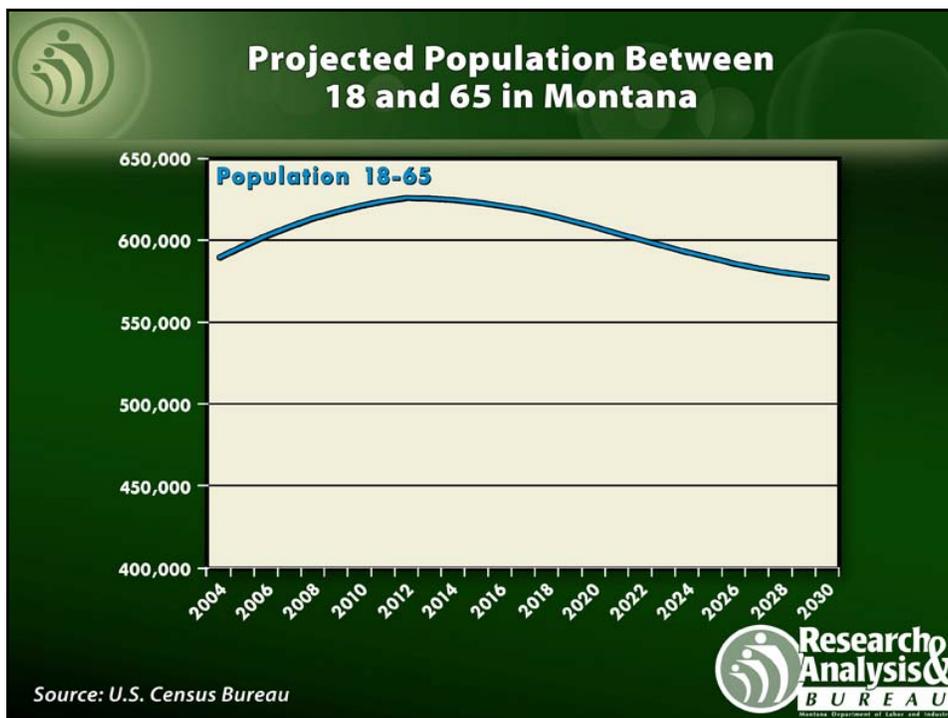


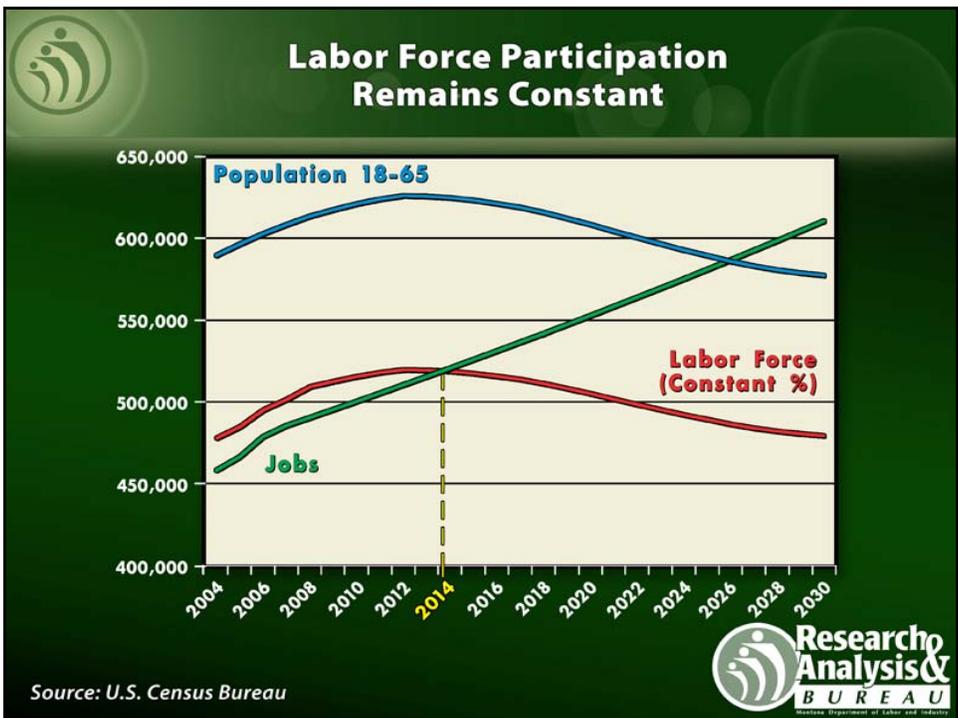
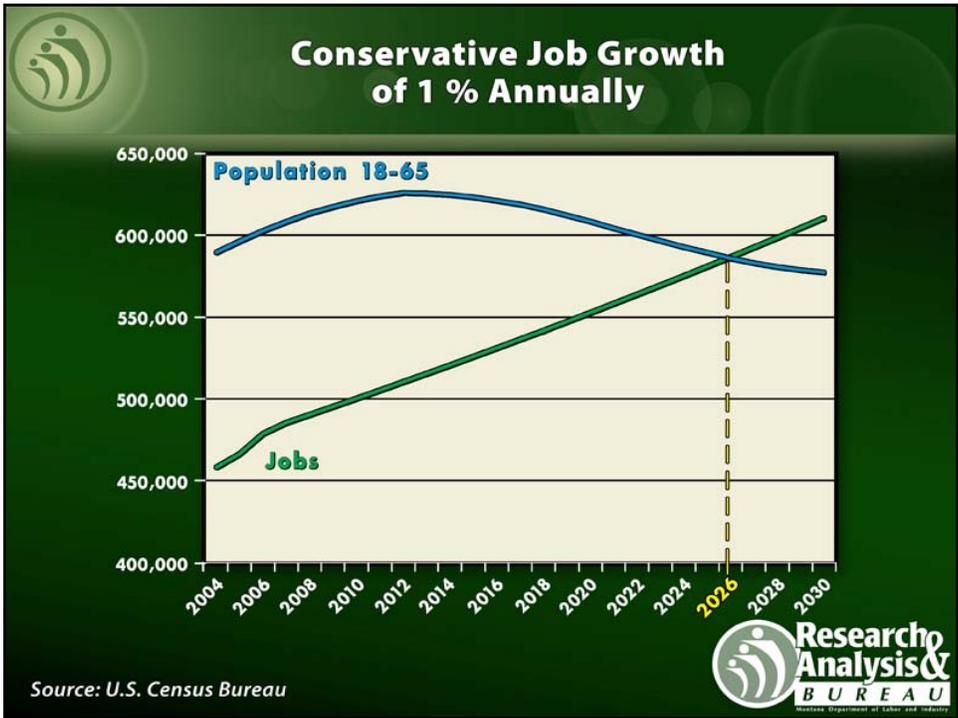
# Impact of Changing Demographics in the Future on Montana's Workforce



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## Aging Demographics Impact

- Obviously, this example is overly simplistic.
- But it demonstrates that tight labor markets can be expected in the future.
- Solutions:
  1. increase labor force participation, and
  2. Increase productivity.
- Both solutions require improved worker education and training



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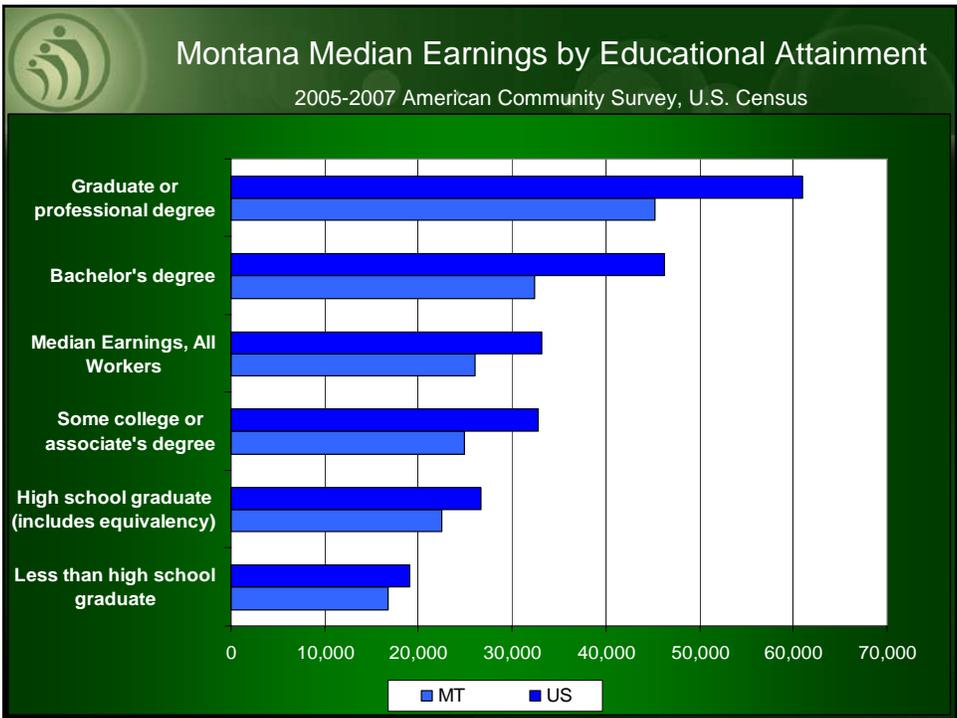
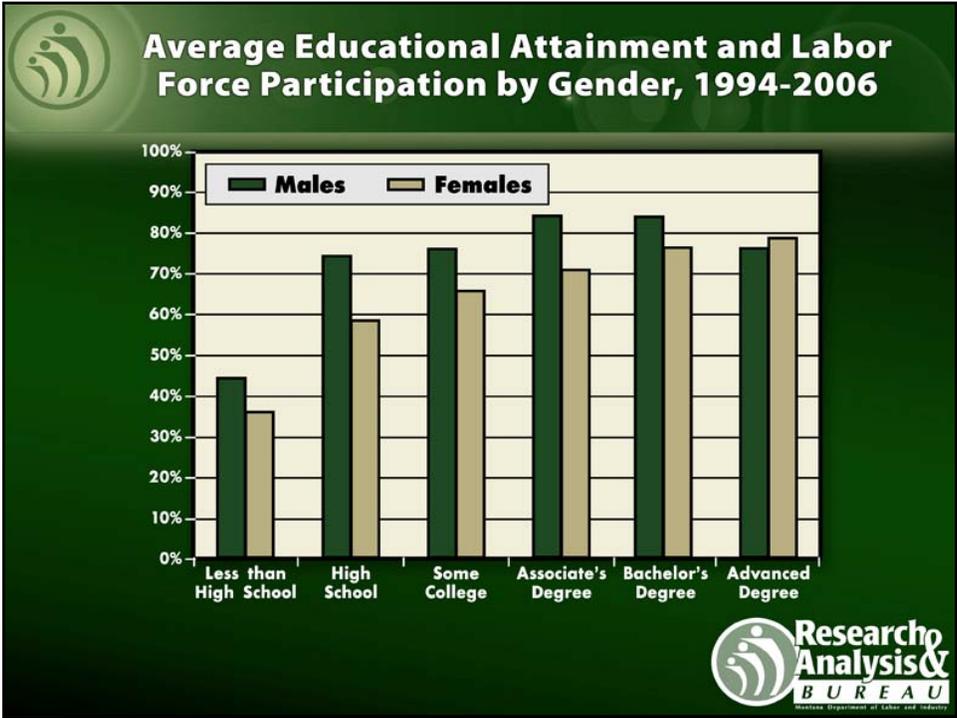
## Where to Find Workers

- In-migrants and Immigrants
- Populations with Lower Workforce Participation
  - Women with small children
  - Workers over 65
  - Young workers
  - Non-High School Completers
  - Minority Populations (American Indian)
  - Ex-offender



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## National Seasonally Adjusted Unemployment Rate by Educational Attainment,

Nov. 2008 and Change over Prior Year,  
Bureau of Labor Statistics

	Nov. 2008	Increase since Nov. 2007
Less than a High School Diploma	10.5	3.0
High School Diploma	6.7	2.4
Some College or Associate Degree	5.3	2.1
Bachelor's Degree	3.0	1.0

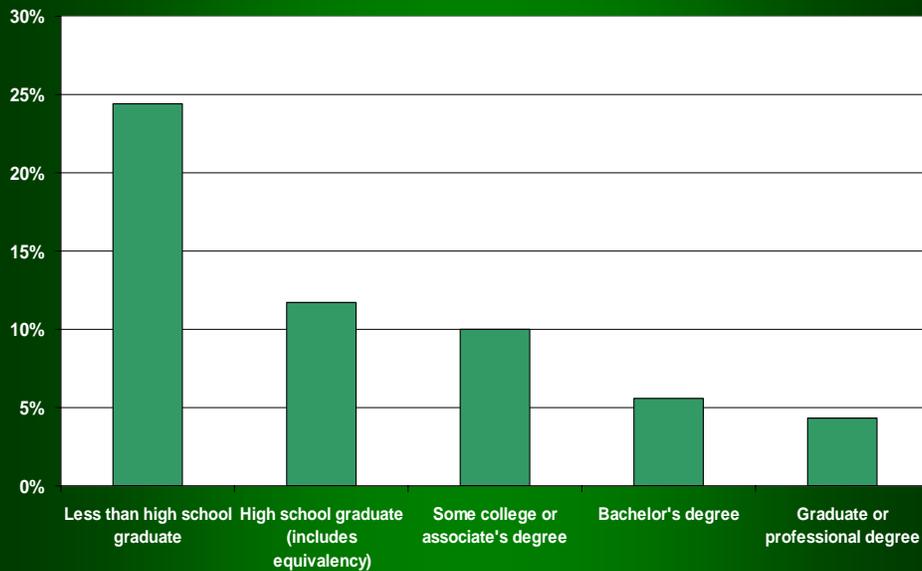


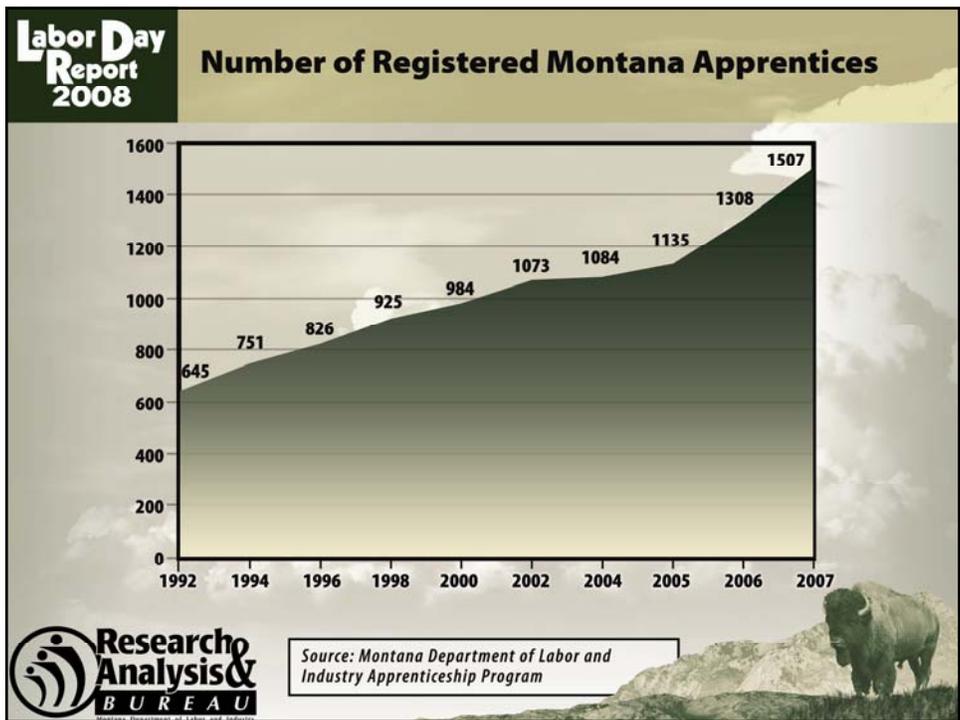
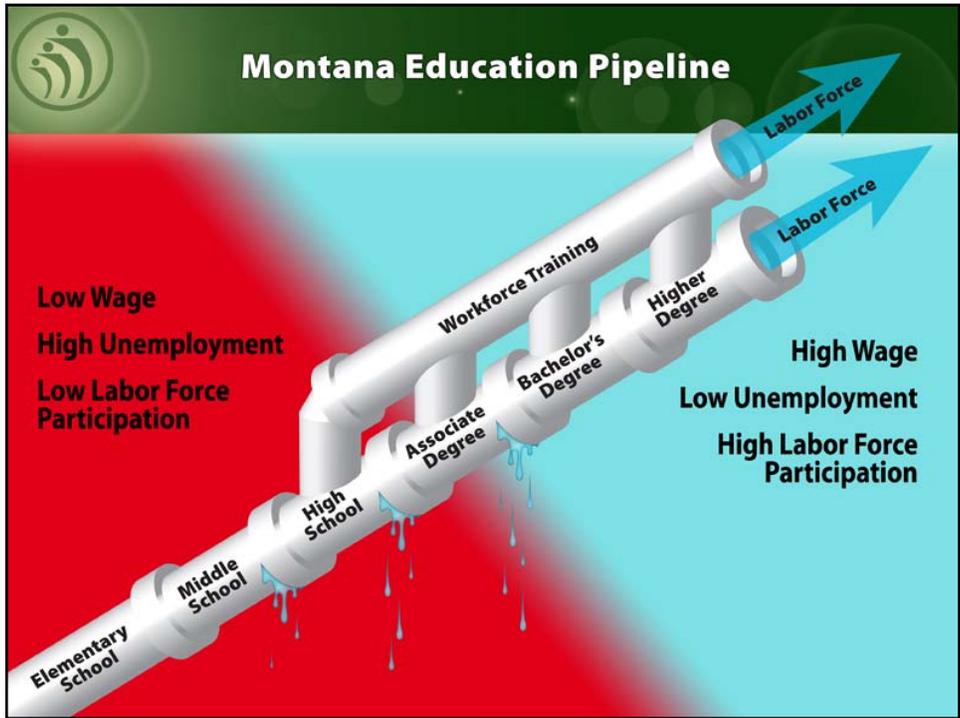
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## Montana Poverty Rate by Educational Attainment

2005-2007 American Community Survey, U.S. Census



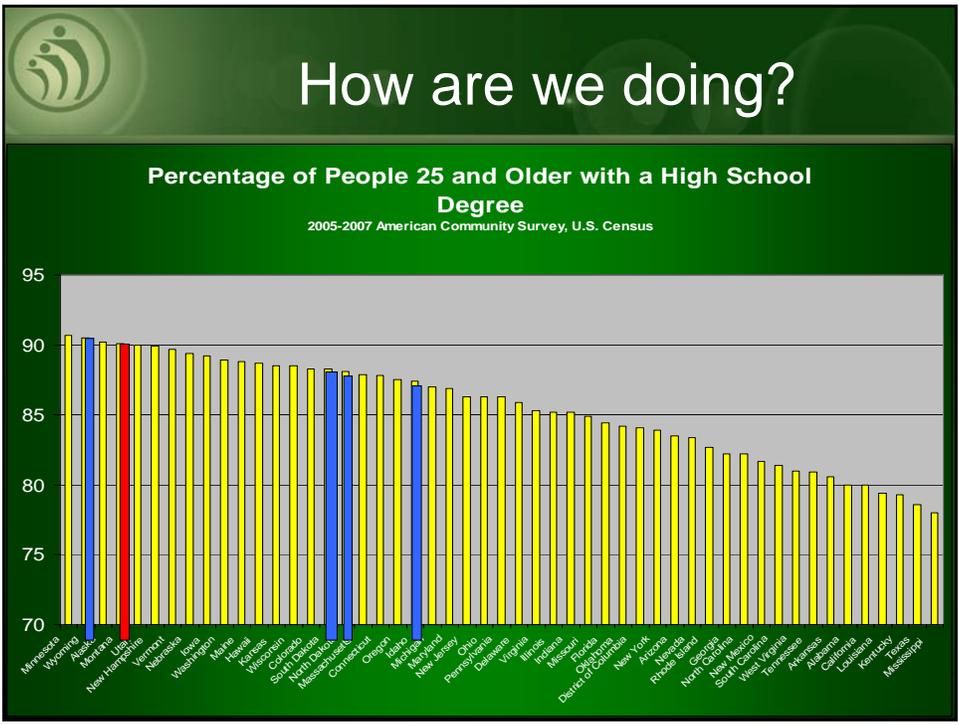


## Montana Department of Labor and Industry's Incumbent Worker Program

- Provides cost-sharing to small employers with less than 20 employees to improve the skills of their existing workers.
- Applications are reviewed by the local Business Expansion and Retention (BEAR) Committee.
- Helps address skill-deficiencies of workers in high-demand occupations.



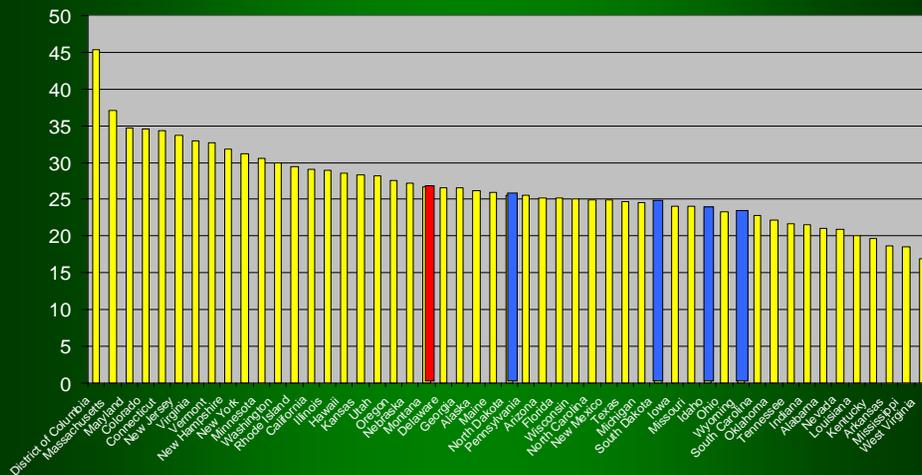
Source: Department of Labor and Industry Incumbent Worker Program





## How are we doing?

Percentage of People 25 and Older with a Bachelor's Degree  
2005-2007 American Community Survey, U.S. Census



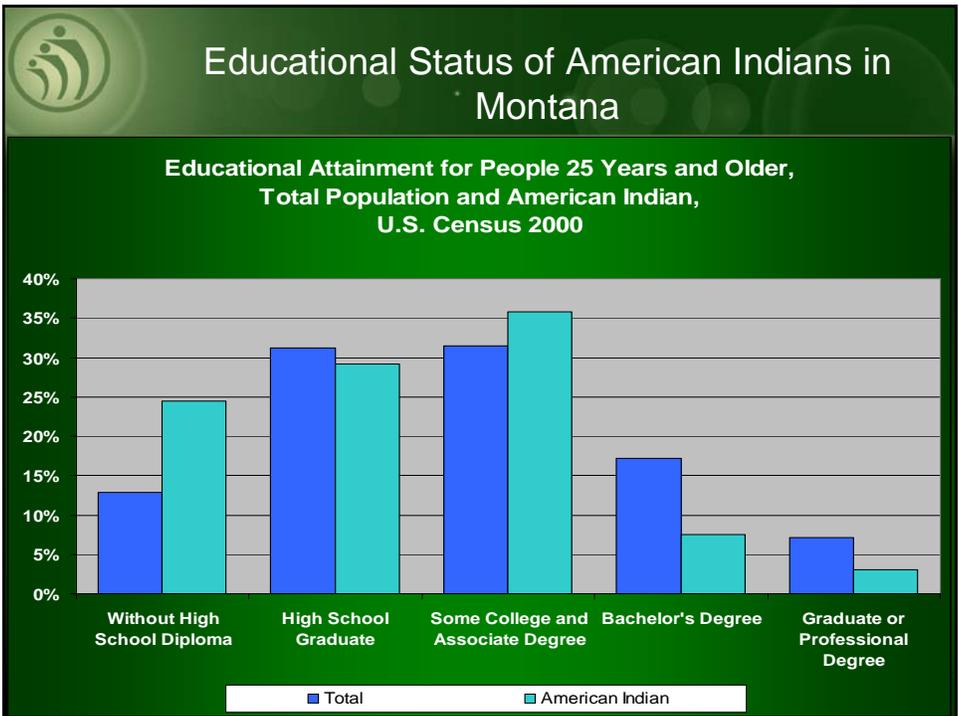
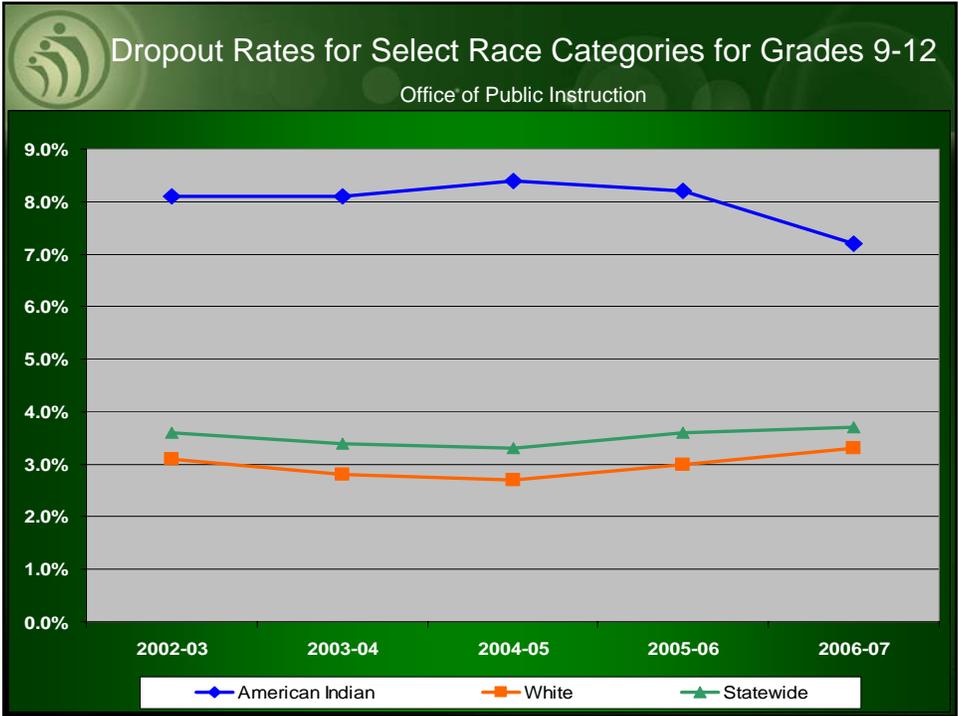
## How are we doing?

- Montana is doing well in comparison to other states, but still has areas for improvement.
  - Minority populations
  - Eastern Montana
  - Advanced degrees
  - Time to degree



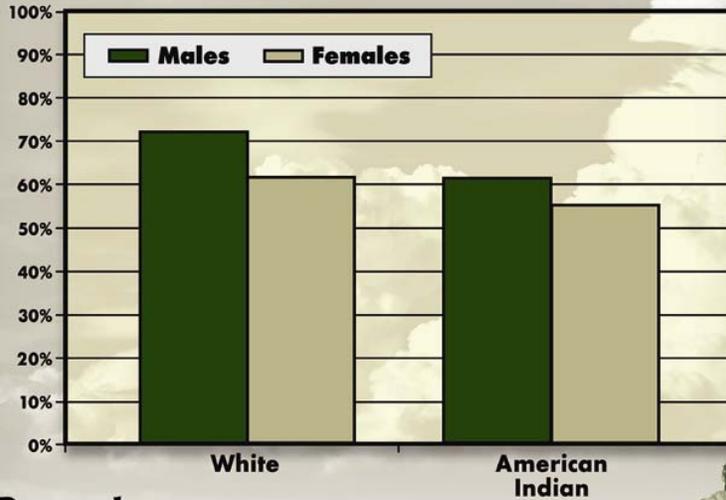
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## Average Labor Force Participation by Race and Gender, 1994 - 2006



## Take-Away Points

- American Indians have lower educational attainment than rest of population.
  - High in two-year degrees.
- Low education levels reduce economic opportunities on reservations.



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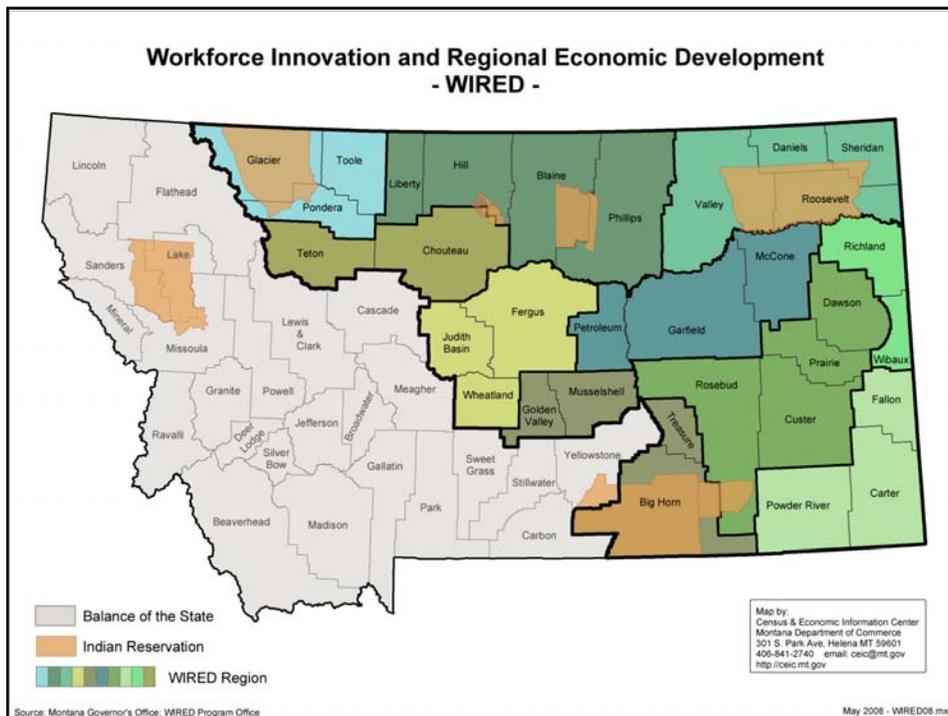


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## Education Levels in Eastern Montana

### Percentage of Population over 25

	WIRED Region	Balance of State	National Average
Without High School Diploma	17%	12%	20%
Without Some College	50%	43%	48%

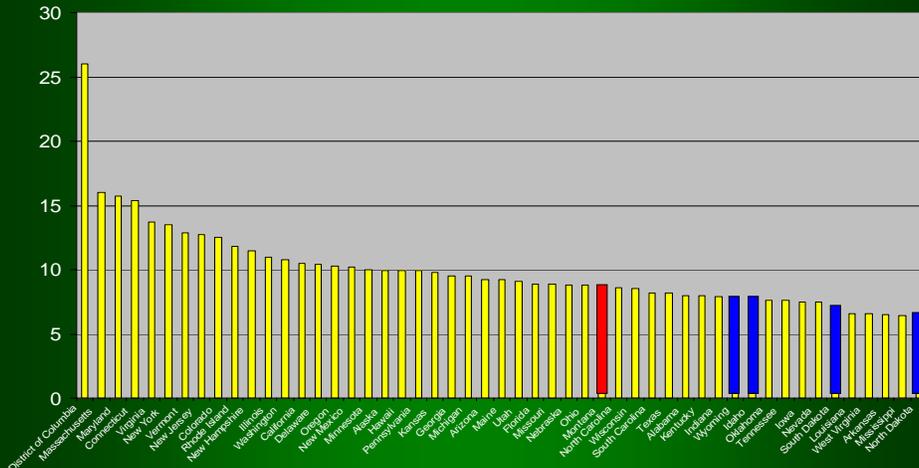


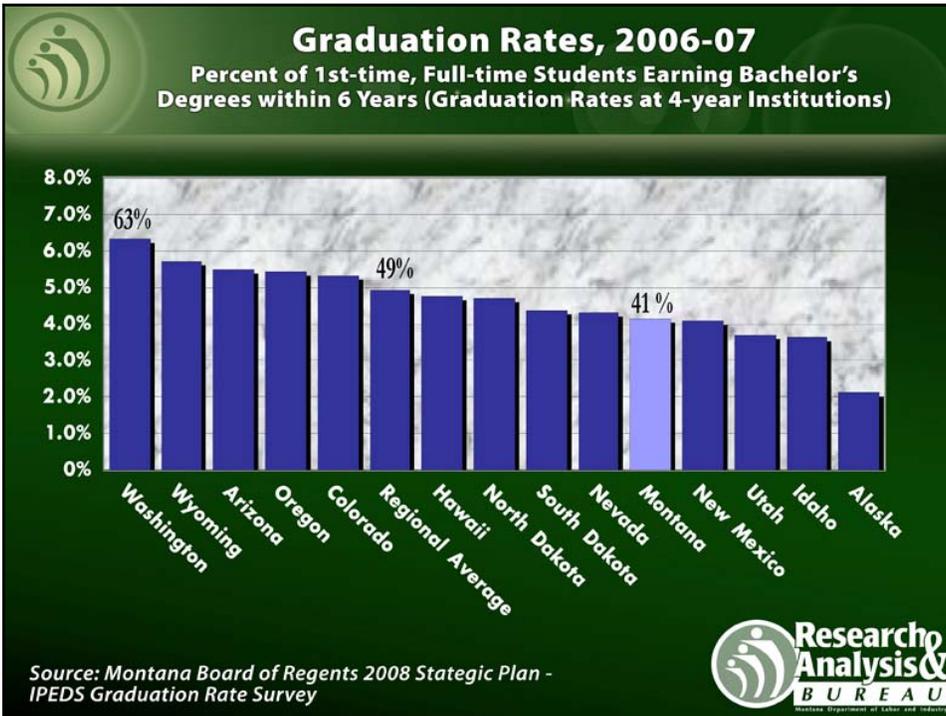
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### Percent of Population 25 and Older with an Advanced Degree 2005-2007 American Community Survey, U.S. Census Bureau





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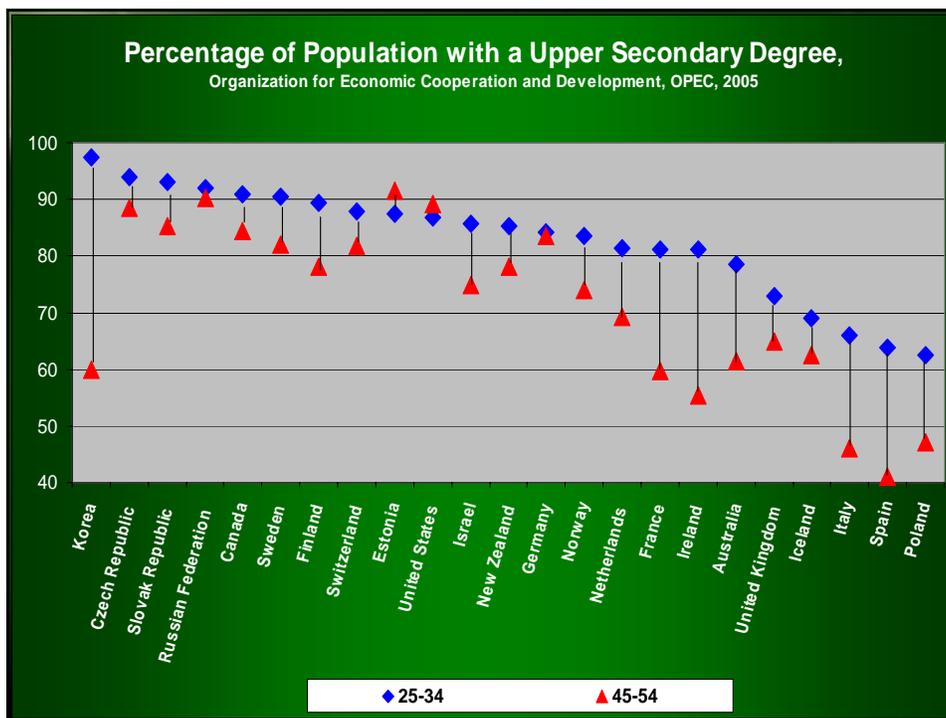


# Globalization Challenge

- Historically, America's growth has come from
  - Increases in productivity from our skilled workforce
  - Innovation



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## Globalization Challenge

- In Montana, we have to do even better to overcome our distance to market and remoteness.
- Businesses locate close to inputs  
OR
- Businesses locate close to consumer markets



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## Global Challenge

- Therefore, if we want high-paying knowledge-based jobs,
- we must first build a well-educated workforce in Montana as an input.
- Build a high-skill workforce, and they will come.



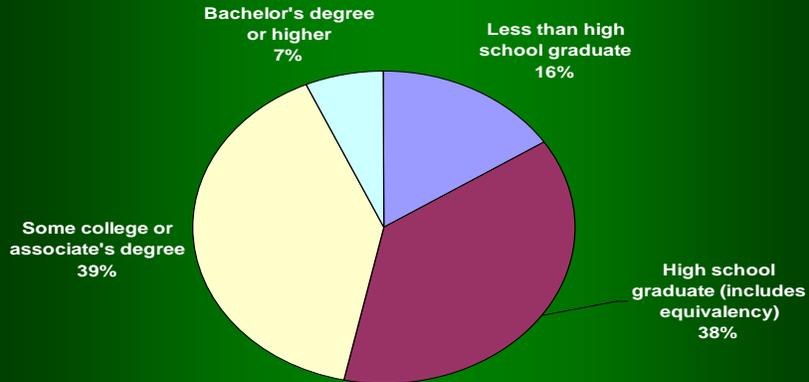
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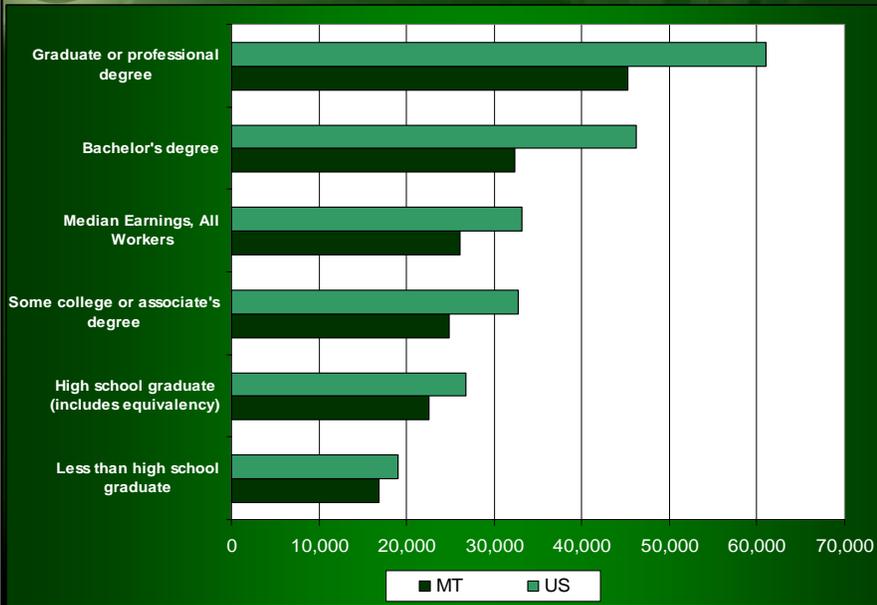
## Educational Attainment of Montana's Population

2005-2007 American Community Survey, U.S. Census



## Montana Median Earnings by Educational Attainment

2005-2007 American Community Survey, U.S. Census



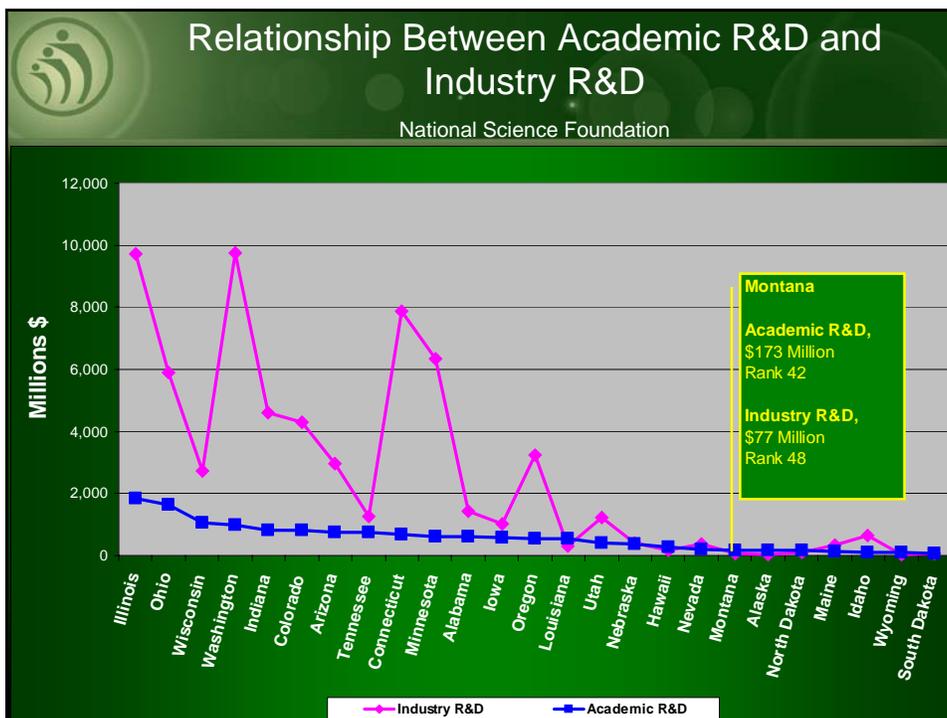


## How to Develop More Knowledge-Based Jobs

- Create seamless workforce training and education system to develop workers from kindergarten through graduate school to continuing workforce education.
- Attract science, technology, and professional services jobs by having a well-educated workforce.
- Create trade organizations to help foster technology diffusion and continued education for professionals.
- Create public / private partnerships to maximize the economic benefits of academic research.



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## Today's Conclusions

Education and worker training is needed to:

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2. Maintain job growth by
  - Maintaining global competitiveness through innovation
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## Questions?

[www.ourfactsyourfuture.com](http://www.ourfactsyourfuture.com)



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